

### Abstract of the Disclosure

A communication system which allows IP-based communication regardless of whether an Internet protocol (IP) connection exists in a mobile telephone network, and a method thereof are provided. The method includes the steps of receiving a request for an IP address of the other terminal, the request being made using a telephone number, checking whether or not an IP address corresponding to the telephone number is registered upon receipt of the request, and assigning an IP address of the other terminal corresponding to information from an IP address server, if the IP address is not registered. Thus, in a mobile telephone network using a telephone number, a terminal can carry out IP-based video and audio communications with the other terminal via a name server or network, regardless of an IP connection of the other terminal.